State to take up the problem and see whether it could be solved. Krupp's action half a century ago formed to some extent the basis of the present law in Germany. The happy relation that existed between capital and labour at Essen did much to disarm socialism. Dr. Bödiker proposed the health of Herr Fried. Krupp, and spoke of him as a real friend to the workpeople, a toast which the large audience drank most enthusiastically.

Space will not permit of making more than the briefest mention of a few out of the many papers that were read at the Congress. Dr. Louis Pemacchi, Director of the Medical Institute for the Injured at Milan, dealt with the necessity of providing special medical education for the treatment of injuries received at work. He discussed at length ambulance work, and expressed the opinion that in Italy the free choice of a surgeon in cases of accident had not been followed by the most satisfactory results, nor did he think that hospital treatment had always been exempt from the same condemnation. Dr. Gustavus A. Weber, of the United States Department of Labour, in speaking of working men's insurance, mentions that in his own country there was no national or State systems of working men's insurance, or of provision for sick benefits or old-age pensions; employers and the working men themselves had tried to grapple with the problems. There was no Workmen's Compensation Act, such as existed in Germany, Great Britain, or Austria. The liability of employers in the United States was regulated for the most part by common law. In a paper entitled The Establishment of Funds for Maternity in Italy, Mr. Henri Scodnik of Naples dealt with the progress of the movement in Milan, Bologna, and Turin. It was recommended that working women should contribute to a compulsory insurance fund, so that for a certain period before and after their confinement they might be able to receive 75 per cent. of their wages.

EDINBURGH HARVEIAN FESTIVAL.

The oration at the 120th Harveian Festival of the Royal College of Physicians of Edinburgh was given by Dr. Kirk Duncanson, the President for the year, on "Harvey: His Life and Times." He traced his early education at home, school, Cambridge, and Padua. The state and influence of Padua at this period was described, and it was pointed out that its agricultural and mercantile prosperity survived the fall of Rome, and continued during the Middle Ages, so that by the end of the fifteenth century these old landed proprietors had become merchant princes, and had built themselves a fine and well-fortified city, on the site of the old Roman town of Patavium. Some of the wealthy citizens became promoters of educational institutions, and the university was founded as early as 1222 by some eminent scholars who had found the University of Bologna too heterogeneous in its teaching to satisfy the more accurate bent of their minds. From that time the new school made steady advance, and the first care of the new rulers of the Venetian Republic, after the Peace of Cambrai, was to confirm the University of Padua in all its ancient privileges, and to encourage students of all nations to visit its schools. By the middle of the sixteenth century the medical school became perhaps the first in Europe. Her students were highly favoured, and were amenable only to the laws of their colleges. At the time of Harvey's studentship the University was at the very zenith of its fame. The buildings of the present University were begun in 1493, and completed in 1550. A great anatomical theatre was opened in 1596; it was capable of seating 300 students. Soon after this several hospitals were established in various parts of the city. In 1545 the first botanical garden in Europe was laid out and planted in Padua. In 1564 the chair of Botany was founded, the first professor being Melchior Wielandt, a native of Königsberg, then reputed the first botanist of Europe. In early life he had been made a prisoner by pirates, and was rescued by Fallopius of Padua, who, recognizing in him a man of science, brought him to Padua, and introduced him to the learned world there. When Harvey studied at Padua the chair of Medicinal Botany was occupied by Prospero Alpino, who was the first to introduce the use of coffee into Europe. Aubrey states that Harvey was wont to drink coffee with his brother Eliab before coffee houses were in vogue in London. Harvey, in his will, made a special reservation of his "coffey-pot." His plate went to his niece Mary West, but the "coffey-pot" to brother Eliab. Prospero Alpino was also the first to observe, teach, and explain the generation of plants by the sexual method.

The most eminent medical professor under whom Harvey studied undoubtedly was Hieronymus Girolamo Fabrizio di Aquapendente. Fabricius succeeded Fallopius in the Chair of Surgery. The fame of Aquapendente attracted students from all quarters, and many of his pupils afterwards became eminent medical men in their own countries. He himself had studied under Vesalius and Fallopius, both of whom had been celebrated for their anatomical researches, more especially with regard to the structure of the heart and blood vessels. Aquapendente continued their researches and demonstrated the valves in the veins. These valves had been observed by Sylvius, Servetus, Eustachius, Paul Sarpi, and others; but neither Fabricius nor any of his predecessors understood their function or real importance. From the year 1574 Aquapendente (so-called from the name of his birthplace) taught and amplified his discovery, and no doubt the instruction Harvey received from him led to the English student's much more important discovery—the circulation of the blood. Aquapendente's fate might well seem to bear out the proverb of a prophet having no honour in his own country, for his important discovery was disputed by his fellow-countrymen not only during his lifetime but for many years after his death. It was left to the unnoticed student from Britain not only to continue his teacher's work, but to carry it to so glorious a conclusion that the fame of the pupil has quite eclipsed that of the master. It would appear that Harvey alone accepted and followed up his master's teaching, and his patience and accuracy were amply rewarded by his great discovery.

Galileo, the creator of experimental science, Professor of Philosophy at Padua for eighteen years, was next referred to. It might reasonably be presumed that Harvey attended his lectures. It was apt to be forgotten that it was to Galileo in 1609 that we owed the microscope. Harvey had left Padua by that time, and we do not find any reference to Harvey using the microscope in any of his researches. In the scanty Italian historical notices of Padua and her University there is no mention of Harvey. Modern Padua, however, makes atonement. Harvey returned to England in 1602. In 1607 he was admitted a Fellow of the College of Physicians of London.

After the accession of James VI of Scotland to the English throne in 1603, the population of London increased with such rapid bounds that the King, in alarm, proposed that a large number of the lowest classes, English as well as Scottish, should be removed from London and taken to the wilds of Scotland, where they could be employed in cultivating the waste lands. The proposed scheme was never carried out. The insufficiently and badly clothed and under-fed crowds lived in miserable hovels in narrow lanes in the heart of the City, or infested the purlieus of the Thames. The sanitary arrangements were hopelessly inadequate. London was seldom free from zymotic diseases of the most virulent type, and finally, in the reign of Charles II, this culminated in the Great Plague. Young Harvey thus must have had ample scope for his talents. In 1609 he was nominated physician to St. Bartholomew's Hospital, and about the same time became Physician Extraordinary to the King. In 1615 he became lecturer on anatomy and surgery to the College of Physicians, and in the following year he expounded his theory on the motion of the heart and blood in animals. His *Anatomical Disquisition* was published in 1628. In 1646, in his 69th year, he retired from public life, but continued his studies, and subsequently in 1651 published his work on *Generation*. At the age of 71 he again visited Italy. He died in his 80th year.

A vote of thanks, on the motion of Dr. Joseph Bell, was given to the Orator.

Annual Dinner.

Thereafter the Harveians dined. Sixty-five sat down. Amongst the guests were Sir James Graham, Mayor of Sydney, an Edinburgh medical graduate; the Very Rev. Dean Wilson; and Dr. Crummer, from Nebraska. The Pontifex Max (the Very Rev. Dr. James MacGregor) was represented by Dr. Wallace Williamson; Professor Chiene, C.B., as Vice-President, was Croupier. The loyal and patriotic toasts were

given, then the "Immortal Memory of Harvey," "The Clergy," by Professor CRUM BROWN, responded to by the Rev. Dr. WALLACE WILLIAMSON; "The Guests," by Dr. CRAIG, and responded to by Sir JAMES GRAHAM and the Rev. Dean WILSON; and "The President," by Dr. STRACHAN. "*Floreat Res Medica*" was given from the Chair. Dr. Somerville (Galashiels) was nominated the next Vice-President.

NOVA ET VETERA.

THE EARLY UNIVERSITIES AND MEDICINE AT OXFORD.

By G. B. FERGUSON, M.D.Oxon., F.R.C.S.Eng.,
President of the British Medical Association.

THE first of the mediaeval medical schools was that remarkable one of Salerno, composed as it was of Greek and Latin, Jewish and Saracenic elements, going back to the ninth century or before, and lasting till it was finally suppressed, less than a hundred years ago, by that heartless iconoclast, Napoleon. Salerno granted no degrees, but only a licence to practise, whence it was never accounted a university. It was the Physicians' and Surgeons' College of the early middle ages, and was later incorporated with the University of Naples.

The first true university is held to have been that of Bologna, the School of Popes and Cardinals, which was founded in 1113. For my own part, I grudge it the name of "university," for it was at first and for a long while only a School of Law. Soon after it arose Paris, the great mediaeval School of Divinity, and early rendered additionally illustrious by the philosophical teaching of Abelard. It is the pride of Oxford that soon after the establishment of Paris—or even before it, as the old Oxonians asserted—the monks of Osney and the Augustinian canons of St. Frideswyde (now the Cathedral of Oxford) had founded schools of learning, thereby establishing in practice the university of the future. Vacarius from Bologna and Robert Pullen from Paris taught law and divinity respectively in those early Oxford schools, which became so famed and frequented that when Gerald de Barri (Geraldus Cambrensis) paid his well-known visit to Oxford in 1187, he could write of the town as full of doctors, masters, and scholars. But abuses soon arose and serious dissensions between townsfolk and scholars; and deeds of violence on the one side were followed by sanguinary reprisals on the other. In the end, the Bishop of Lincoln interposed and appointed Robert Grosseteste as the first Chancellor in 1214, the year before the signing of Magna Charta; and then the University was formally founded, and the earliest degrees were conferred, the very first, I believe, on Edmund Rich, afterwards Archbishop of Canterbury and finally St. Edmund.

More than 100 years earlier, in the time of William the Conqueror, there was at Oxford, if we can believe the *Anglica Judaica*, a Jewish school of medicine. We owe much to the Jews of those early days. They were brought to England by the Norman monarchs, and brought with them not only trade and commerce, which meant wealth, but brought likewise science and medicine. But for them and their wealth many of the great Norman cathedrals would never have been built. It is a pity that we have no particulars about the old Oxford Medical School, which, so far as I know, acknowledges only one predecessor in Europe and no present competitor (unless it be Montpellier) now that Salerno is gone. The University was founded just thirty five years before the first College. A point of greater interest lies in the fact, narrated in the *Monumenta Franciscana*, that in the year 1251 the first university teacher of medicine was appointed. His name was Stokes, a name of good omen for both medicine and surgery. Stokes was presumably appointed to carry on the Jewish school, and his appointment was a necessity, as in the next reign, of Edward I, the Jews were expelled from England, and never a Jew set foot thereon for nearly 400 years, that is to say, before the time of Cromwell. Stokes was a master (in common parlance Doctor) of Physic, but not a Doctor of Medicine, for the good reason that there was no such thing in his time in Europe; nor was there for about 100 years later, when that degree was first conferred at the newly founded University of Prague. The reasonableness and propriety of exalting the youngest of the faculties to the full dignity of the Doctorate was soon recognized, and Doctorates in Medicine were in due course granted in Italy and in France.

Innovations did not travel rapidly in those days, and it needed yet another 100 years before we can find irrefragable evidence of true Medical Doctors at Oxford. That evidence is in the possession of the Regius Professor, to whom, directly or indirectly I owe the best part of my facts. The first recorded Medical Doctor at Oxford was Thomas Edmonds, date 1449, and after him was John Faceby, Physician to Henry VI, 1451, and next to him Thomas Bloxham, 1455. Seeing how enthusiastic and successful the University of Cambridge has always been in medical matters, I was sadly afraid that it might have been the first to confer Medical Doctorates in England and my fears were alone allayed, when owing to the kindness of Professor Clifford Allbutt, and of the Registrary of the University of Cambridge, I ascertained that Cambridge was indeed well up and close, but still a clear five years behind. It was well that Oxford and Cambridge did bestir themselves, as only twenty years later than Oxford, Glasgow began, first, among Scottish Universities to confer Doctorates in Medicine.

After 1455 the the Oxford Register is missing, and it does not begin again for fifty years, from which date of 1505 it is continuous to the present day. That gap of fifty years, which includes the troublous times of the Wars of the Roses, is most unfortunate, as it covers the period when Linacre was at Oxford. I feel sure that he did take his D.M. degree there and that he lived there, for does not Erasmus write of him from Oxford and tell of his acuteness, profundity, and refinement? We know Linacre's subsequent history: how he went to London and became Physician to Henry VII and Henry VIII, and how, when the Royal College of Physicians was founded by the latter, Linacre became its first President; and how, from that day till this, the majority of its Presidents have been Doctors of Oxford. I fear there can be no doubt that the ancient and active Medical School of Oxford fell into decadence, notwithstanding the medical Professorships founded by Linacre, until, twenty-five years ago, some even wrote of "the lost Medical School." But that which was lost is found, and now advances steadily from strength to strength. I must add, however, that I agree with the late Mr. Cecil Rhodes and think it a great pity that the Oxford School of Medicine is not made more complete—we want Professorships of Surgery, Midwifery—and considering the large funds which will remain in the hands of Mr. Rhodes's trustees I think that the authorities of the Oxford Medical School should approach those trustees, in order that they may carry out the clearly-expressed wishes of the testator.

I will not mourn over the happy time when all English physicians were of Oxford and Cambridge, for the more modern universities have moved quickly with the times, and among their sons have been many who have done honour to their almae matres, who have advanced the bounds of knowledge, and have adorned the very highest positions in medicine and surgery. None the less the charm and glamour of antiquity remain to hallow the old degrees. Is it nothing for the Oxford men of to-day to remember that they are the successors of Linacre and Radcliffe; of Sydenham and Sir Thomas Browne of the *Religio Medici;* of John Mayow, who discovered the existence of oxygen, though he called it nitro-aërial spirit, 100 years before Priestley; of Thomas Willis, whose name lives for ever at the base of the brain, and of many other worthy men, estimable in their day, former Presidents of the Royal College of Physicians, down to Matthew Baillie and to that ancient, born out of his due time, William Alexander Greenhill?

Cambridge can, of course, give a list no less imposing, but having written this narrative from an Oxford point of view and brought it down to the present day, it may here most fitly end.

These inquiries, some of the results of which, at the suggestion of the editor, are set forth above, had their origin in view of an address recently delivered by the writer before the Oxford Medical Graduates' Club.

THE medical students of Paris have decided to form a General Students' Association.